

REMARKS

Applicant respectfully requests entry of the above amendment prior to examination. Claims 1, 4, 17, 21-23, 26, 33, 34, 37-39, and 42 are presently pending. Claims amended herein are none. Claims cancelled herein are 2, 3, 5-16, 18-20, 24, 25, 27-32, 35, 36, 40, 41, and 43. New claims added herein are none.

Claims 1, 4, 17, 21-23, 26, 33, 34, 37-39, and 42, which were cancelled from the parent application, are reintroduced here into this application. To avoid confusion, the numbering of the claims from the parent application is maintained here.

Claims 2, 3, 5-16, 18-20, 24, 25, 27-32, 35, 36, 40, 41, and 43 are withdrawn here because they were allowed in the parent case. These claims are labeled "withdrawn but allowed in parent".

The Applicant expressly grants permission to the Office to interpret all pending claims of this application.

Herein, the "Action", "Office Action", or "Office" refers to the Office Action of the parent application, such Office Action being dated January 2, 2003.

Prior Art Status of References

Applicant does not explicitly or implicitly admit that any reference is prior art. Nothing in this communication should be considered an acknowledgement, acceptance, or admission that any reference is considered prior art.

1 **Traversal of Official Notices**

2 In this Office Action, the Office rejects claims 15, 19 and 20, at least in
3 part, by taking Official Notice.

4 Applicant maintains its traversal of the Official Notices. If facts are well-
5 known to those of ordinary skill in the art, then Applicant asks the Office to cite
6 one or more references to support that assertion.

7 **Supplemental Preliminary Amendment to Follow**

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9 As soon as possible, Applicant will submit a Supplemental Preliminary
10 Amendment with a completed Declaration under 37 C.F.R. §1.131 and with
11 supporting documentation. Applicant is still gathering the required signatures.

12 If the Office should pick-up this document for examination before receiving
13 the supplemental amendment, Applicant asks the Office to call the undersigned
14 attorney for the Applicant to inquire about the status of such.

15 **Section 131 Declaration**

16 With the Supplemental Preliminary Amendment, Applicant will submit a
17 Declaration under 37 C.F.R. §1.131 and supporting documentation to evidence
18 that the invention was conceived in the United States prior to the June 5, 1998
19 priority date of U.S. Patent No. 6,332,194 to Bloom et al. ("Bloom"). Accordingly,
20 the Bloom reference should be removed as a reference at that time because it is not
21 prior art.
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Substantive Claim Rejections

Claim Rejections under §102 and §103

The Office rejects all pending claims under §102 and §103. For the reasons set forth below, the Office has not made out a *prima facie* case of anticipation (i.e., §102). Likewise, for the reasons set forth below, the Office has not made out a *prima facie* case of obviousness (i.e., §103). Accordingly, Applicant respectfully requests that the rejections be withdrawn and the case be passed along to issuance.

The Office's rejections are based upon one or more of the following references (in combination or alone):

- **Bloom:** *Bloom et al.*, US Patent No. 6,332,194;
- **Mintzer:** *Mintzer et al.*, "If One Watermark is Good, Are More Better?", Acoustic, Speech, and Signal Processing, vol. 4, pp. 2067-2069, 1999; and
- **Levine:** *Levine et al.*, US Patent No. 6,209,094.

Anticipation Rejections

§102 Rejections based upon Bloom

The Office rejects claims 1, 4, 17, 21-23, 26, 33, 34, and 37 under 35 USC §102(e) as being clearly anticipated by Bloom.

In view of the §131 Declaration (which will be submitted with the Supplemental Preliminary Amendment), Bloom will be removed as prior art. Accordingly, Applicant respectfully requests withdrawal of the §102(e) rejection.

§102 Rejections based upon Mintzer

The Office rejects claims 26, 34, and 37 under 35 USC §102(a) as being clearly anticipated by Mintzer.

Claims 26 and 34 recite, “the first and second portions are separate” and claim 37 recites, “the first and second portions are separate.” This is where the first portion/segment has the strong watermark and second portion/segment has the weak watermark. Unlike Mintzer, these watermarks are not layered on top of each other.

In contrast to these claims, Mintzer describes the insertions of multiple watermarks, but does not expressly state where. Indeed, Applicant submits that Mintzer implies that the watermarks are layered on top of each other.

Mintzer expresses a concern that later watermark insertions after the initial insertion may damage the initially inserted mark. At page 2068, in the middle of the 2nd col., under section 2, Mintzer says this:

Embedding a fragile watermark followed by embedding a robust watermark is bound to damage the fragile watermark. Indeed,

1 by design, a fragile watermark should be damaged by any operation
2 that alters the image, and robust watermarking is such an operation.

3 ...

4 Embedding multiple watermarks will then be successful if the
5 robust watermarks are sufficiently robust to withstand all subsequent
6 watermark insertions.

7 It seems that the potential for damaging already-inserted marks occurs only
8 if the portions in which the marks are inserting are co-extensive. In other words,
9 the first and second portions of the signal are not separate.

10 Although Mintzer claims that embedding a robust watermark after the
11 fragile one is "bound to damage the fragile watermark," that is not the case with
12 the watermarks embedding in accordance with this claims.

13 Why? Unlike Mintzer, the watermarks of these claims are not layered on
14 top of each other. Instead, each watermark is embedded into "separate"
15 portions/segments. Therefore, there is no concern about the order in which the
16 watermarks are embedded with elements recited in these claims.

17 Therefore, Mintzer does not disclose every element of these claims.
18 Accordingly, Mintzer does not anticipate these claims. Applicant asks that the
19 Office withdraw this rejection.

Obviousness Rejections

The Office Has Not Made Out a Case of Prima Facie Obviousness

Applicant disagrees with the Office's obviousness rejections and respectfully submits that the Office has not made out a *prima facie* case of obviousness. Accordingly, Applicant respectfully requests withdrawal of these rejections.

§103 Rejections based upon Mintzer and Levine

The Office rejects claims 38-39 and 42 under 35 USC §103(a) as being unpatentable over Mintzer in view of Levine.

Levine is not concerned with multiple disparate watermarks. Rather, it is focused on increasing the robustness of a watermark in an audio signal and thereby making it more difficult to attack. Therefore, Levine's discussion (in lines 45-51 of col. 5) about audible range of the human listener is emphasizing the benefits of embedding watermarks in the audible range to enhance their robustness.

Mintzer is discussed about with respect to the anticipation rejections of claims 26, 34, and 37. Mintzer is about layering multiple marks, but no distinction is made as to where. Levine is about inserting a single mark in a particular portion of a signal. Combining to two produces a system that layers multiple watermarks in a particular portion of a signal. That is not what these claims cover.

Applicant submits that Mintzer and Levine reveal no motivation to combine their teachings. Furthermore, the combination of these teachings does not result in

1 what is recited by this claim. Accordingly, these claims are not obvious for the
2 above reasons.

3 All of these claims depend upon claim 37. As indicated above, claim 37 is
4 allowable. Therefore, in addition to their own merits, these claims are allowable
5 because their base claim is allowable.

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7 **§103 Rejections based upon Bloom and Levine**

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9 The Office rejects claims 38-39 and 42 under 35 USC §103(a) as being
10 unpatentable over Bloom in view of Levine.

11 In view of the §131 Declaration (which will be submitted with the
12 Supplemental Preliminary Amendment), Bloom will be removed as prior art.
13 Accordingly, Applicant respectfully requests withdrawal of the this rejection.

14 **Dependent Claims**

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16 In addition to their own merits, each dependent claim is allowable for the
17 same reasons that its base claim(s) is allowable. Applicant asks for the Office to
18 withdraw its rejection of each dependent claim where its base claim(s) is
19 allowable.

20 **Claim Amendments**

21 All of the claim amendments are done to make the claim language more
22 readable, linguistically clearer, and/or grammatically correct. None of the
23 amendments is done to meet any statutory requirement. None narrows the scope of
24 the claims.
25

1 Conclusion

2 All pending claims are in condition for allowance. Applicant respectfully
3 requests reconsideration and prompt issuance of the application. If any issues
4 remain that prevent issuance of this application, the Office is urged to contact the
5 undersigned attorney before issuing a subsequent Action.

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7 Respectfully Submitted,

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9 Dated: 7-15-03

10 By: 

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